Please amend the subject application as follows:

Amendments to the claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of claims:

1. (Currently Amended) An immortalized human undifferentiated cardiomyocyte cell line, wherein the cell line (a) expresses β-myosin heavy chain, connexin-43, and desmin, (b) does not exhibit obvious voltage-activated conductances in whole-cell voltage-clamp recordings, (c) comprises a replicable vector that expresses SV-40 large T antigen, and ~~wherein the cell line~~ (d) is produced by a method comprising the step of fusing a post-mitotic primary non-immortalized human cardiomyocyte obtained from adult human heart tissue with a human fibroblast, the fibroblast

   ~~(a)~~ (i) having been treated with ethidium bromide;

   ~~(b)~~ (ii) comprising a replicable vector expressing SV40 large T antigen which confers immortality on a cell comprising same; and

~~(c)~~ (iii) being free of mitochondrial DNA.

2. (Canceled)

3. (Previously Presented) An immortalized human undifferentiated cardiomyocyte cell line, wherein the cardiomyocyte cell line is designated AC16 (ATCC Designation No. PTA-1500).

4. (Previously Presented) An immortalized human undifferentiated cardiomyocyte cell line, wherein the cardiomyocyte cell line is designated AC10 (ATCC Designation No. PTA-1501).

5. (Previously Presented) An immortalized human undifferentiated cardiomyocyte cell line, wherein the cardiomyocyte cell line is designated RL14 (ATCC Designation No. PTA-1499).

6. (Canceled)

7. (Canceled)

8. (Previously Presented) A method for preparing a human undifferentiated immortalized cell line derived from a post-mitotic primary cell culture which comprises:

(a) providing a cell culture of human primary post-mitotic cells;

(b) providing a human fibroblast cell line which

(i) has been transfected with a replicable nucleic acid vector expressing SV40 large T antigen which immortalizes the fibroblast cell line, and

(ii) has been depleted of its mitochondrial DNA;

(c) co-culturing the human fibroblast cell line of step (b) with the cell culture of step (a) under appropriate conditions so that cell fusion occurs;

(d) growing the fused cells from step (c) in a selection medium which selects for cells with mitochondrial DNA; and

(e) selecting cells from step (d) which

(i) contain a replicable vector that expresses SV-40 large T antigen, and

(ii) express one or more genes specifically expressed by the primary post-mitotic cell of step (a),

so as to prepare the human immortalized cell line.

9. (Original) The method of claim 8, wherein the cell culture of human primary non-proliferating cells in step (a) is a cell culture of primary human cardiac cells, primary human skeletal myoblast cells, human neuronal cells, or primary human osteoblast cells.

10. (Canceled)

11. (Canceled)

12. (Original) The method of claim 8, wherein the appropriate conditions for cell fusion in step (c) comprise incubation for about one minute in a 50% PEG solution.

13.-19. (Canceled)